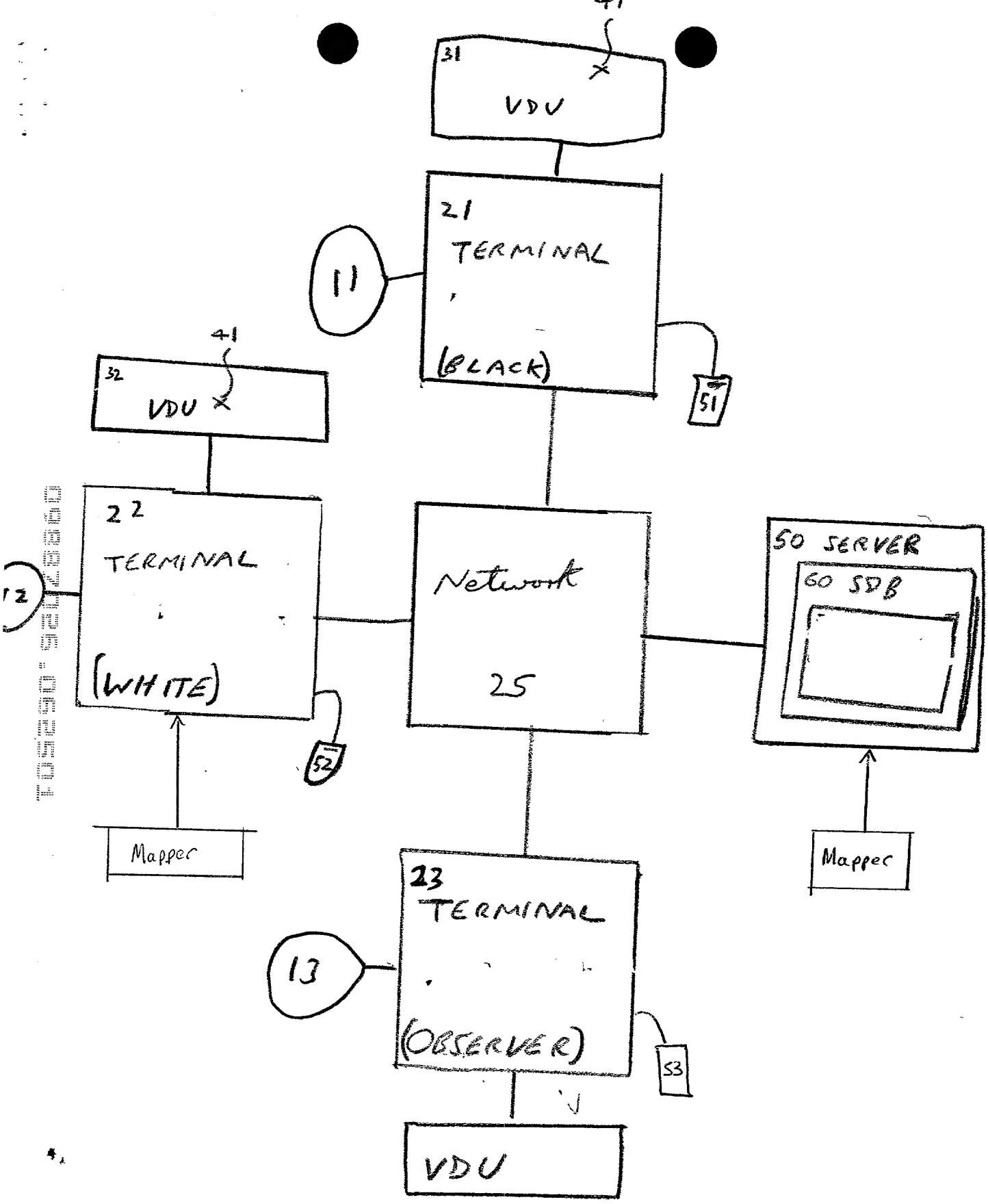

41
31
VDU
21
TERMINAL
(BLACK)
11
51
41
32
VDU
22
TERMINAL
(WHITE)
12
52
Network
25
50 SERVER
60 SDB
Mapper
Mapper
23
TERMINAL
(OBSERVER)
13
53
VDU

FIG. 1

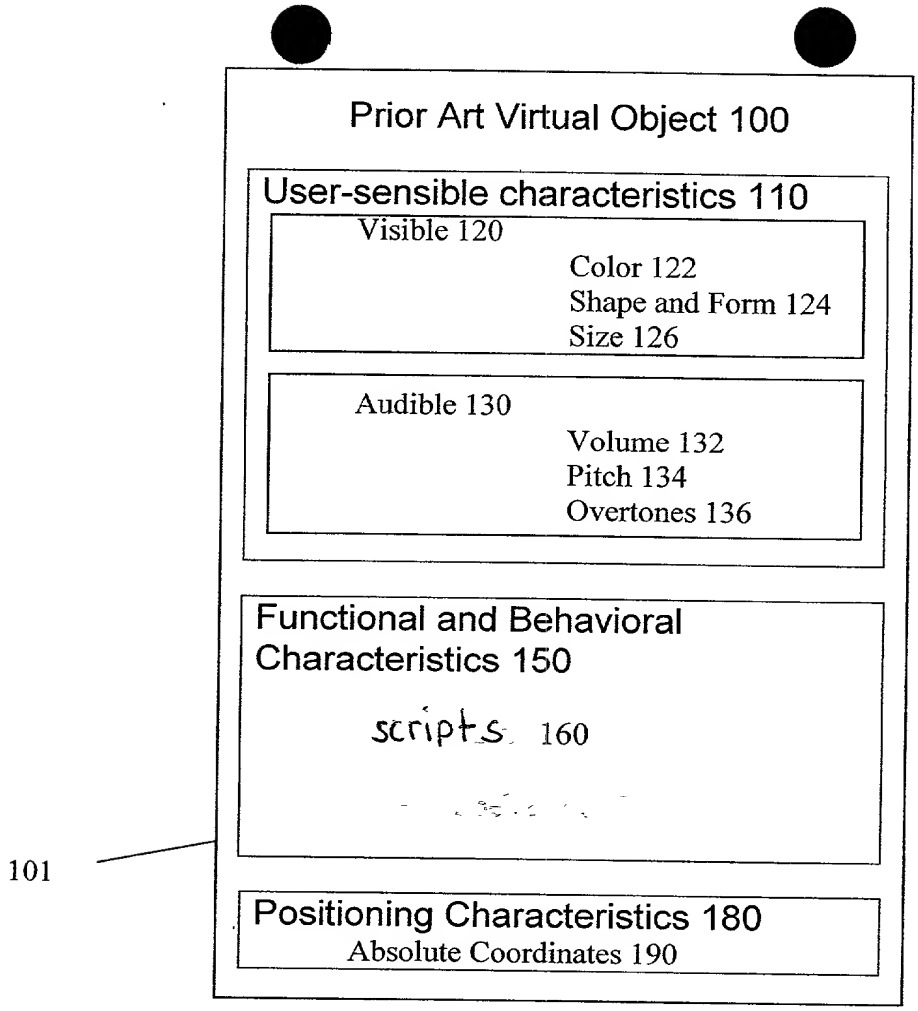

Prior Art Virtual Object 100
User-sensible characteristics 110
Visible 120
Color 122
Shape and Form 124
Size 126
Audible 130
Volume 132
Pitch 134
Overtones 136
Functional and Behavioral Characteristics 150
scripts 160
Positioning Characteristics 180
Absolute Coordinates 190
101

Fig. 2

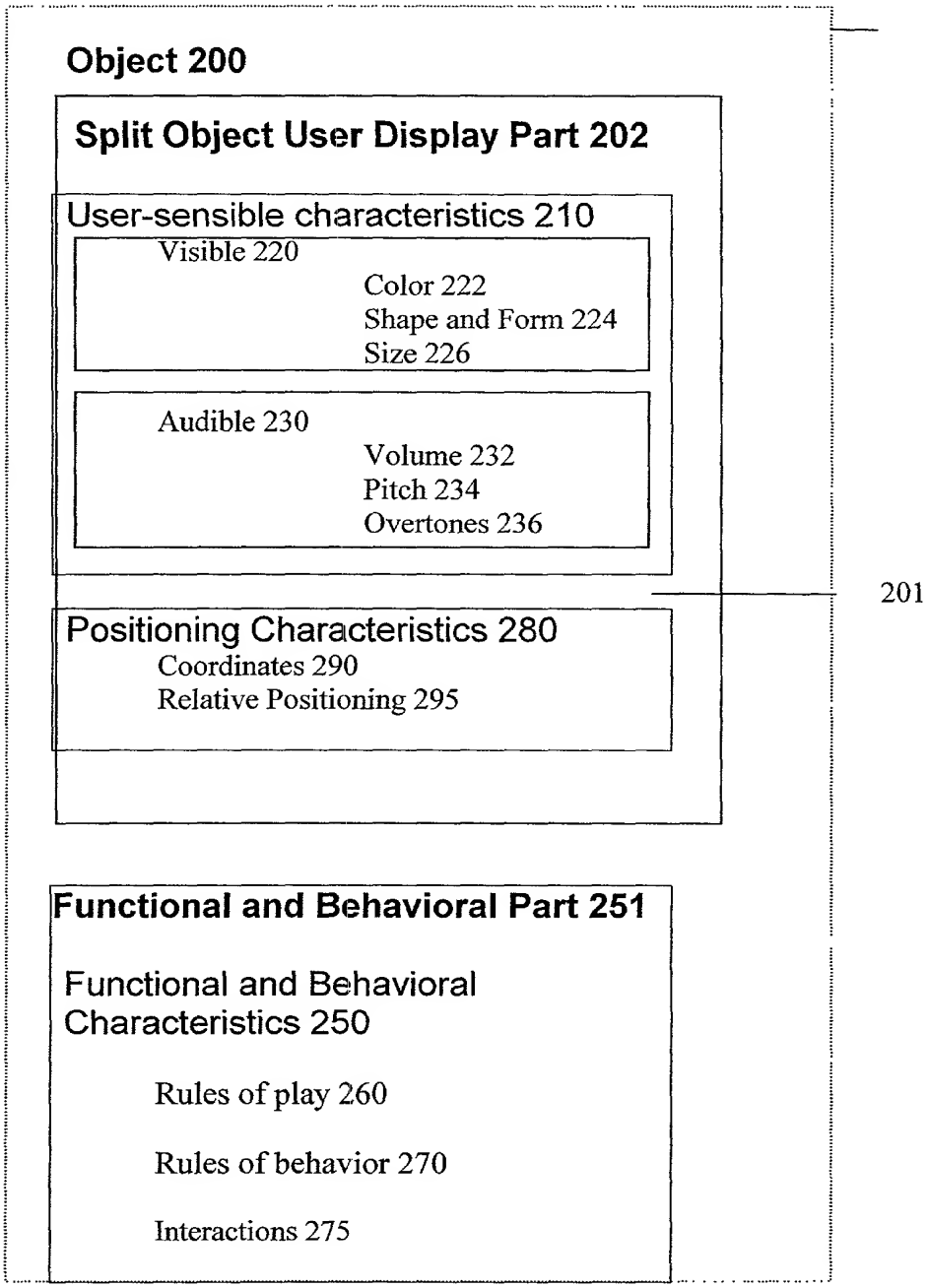

Object 200
Split Object User Display Part 202
User-sensible characteristics 210
Visible 220
Color 222
Shape and Form 224
Size 226
Audible 230
Volume 232
Pitch 234
Overtones 236
Positioning Characteristics 280
Coordinates 290
Relative Positioning 295
Functional and Behavioral Part 251
Functional and Behavioral Characteristics 250
Rules of play 260
Rules of behavior 270
Interactions 275
201

Fig. 3

TOS290 92078860

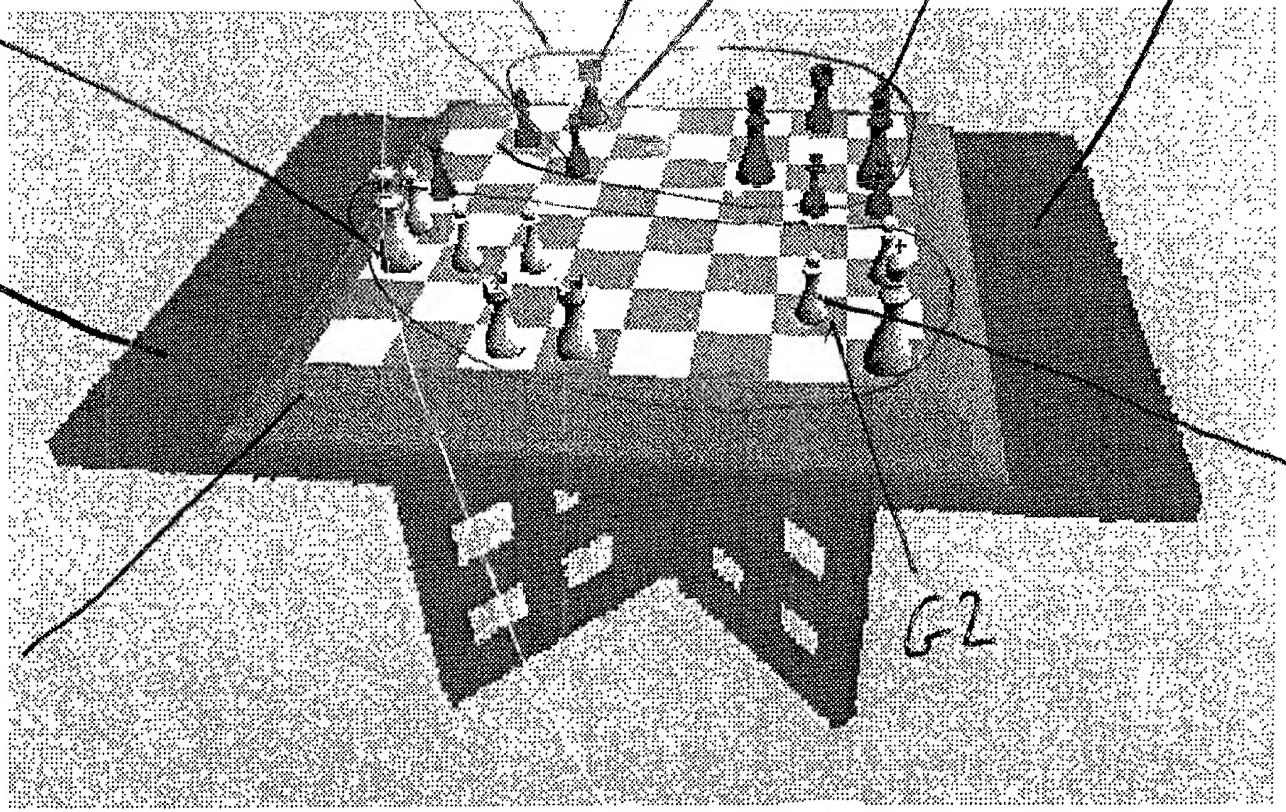
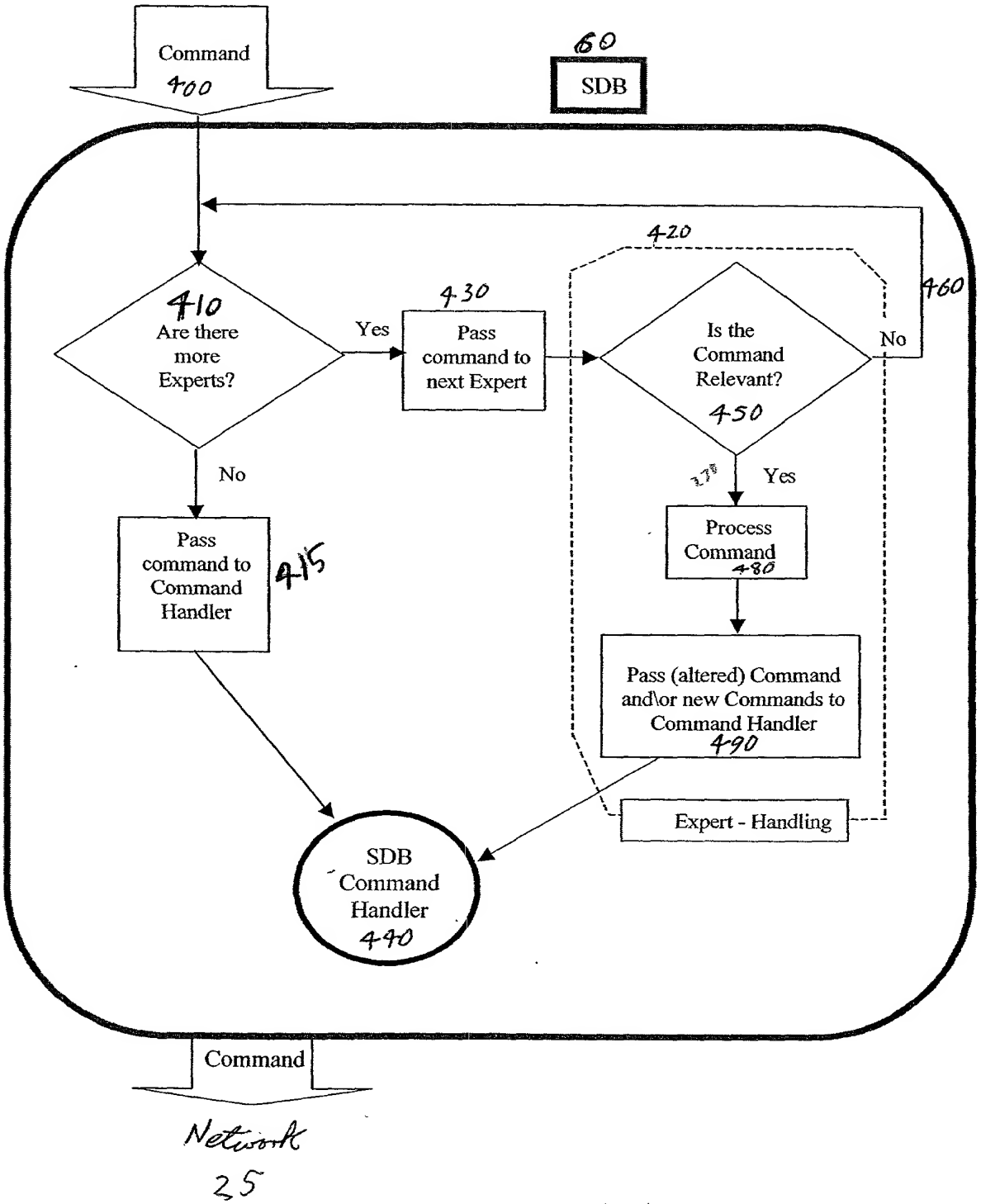


Fig 4

Command Processing with Experts – Diagram

Network



Network

25

16-5

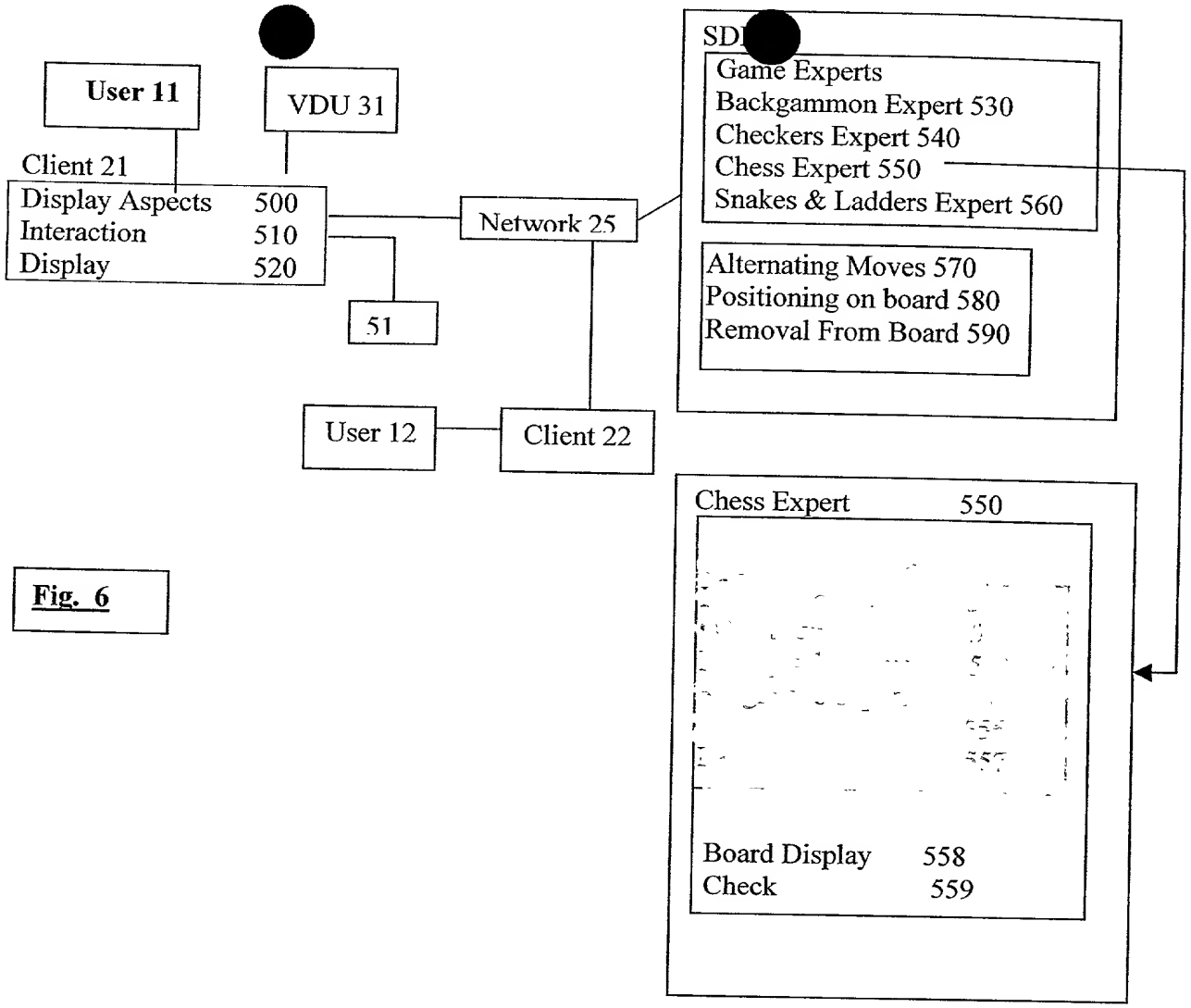

User 11
VDU 31
Client 21
Display Aspects 500
Interaction 510
Display 520
51
Network 25
SD
Game Experts
Backgammon Expert 530
Checkers Expert 540
Chess Expert 550
Snakes & Ladders Expert 560
Alternating Moves 570
Positioning on board 580
Removal From Board 590
User 12
Client 22
Chess Expert 550
Board Display 558
Check 559

Fig. 6

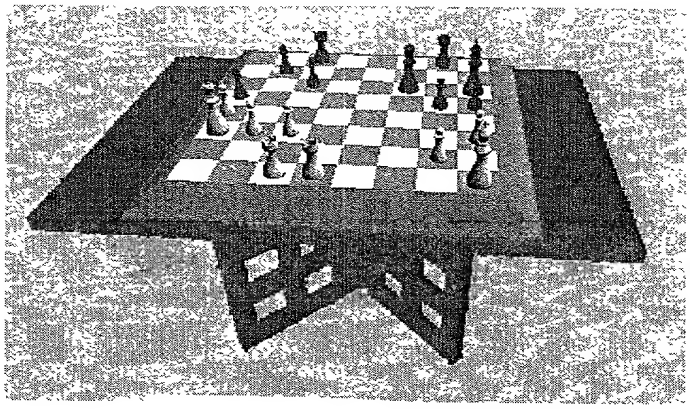


Fig 6

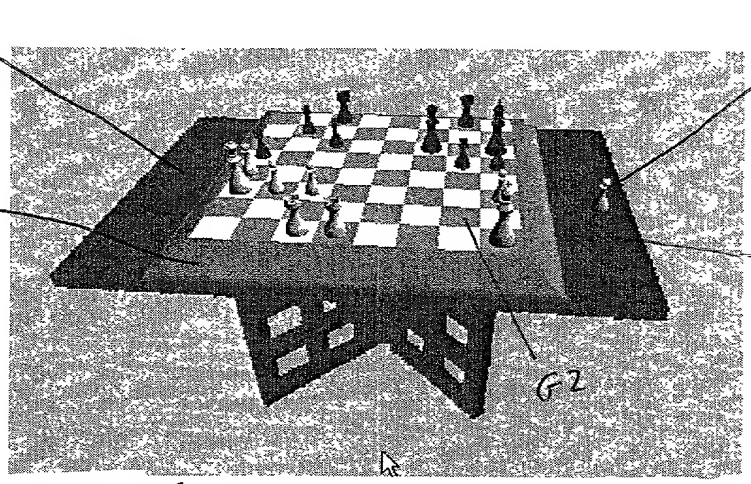


Fig 7

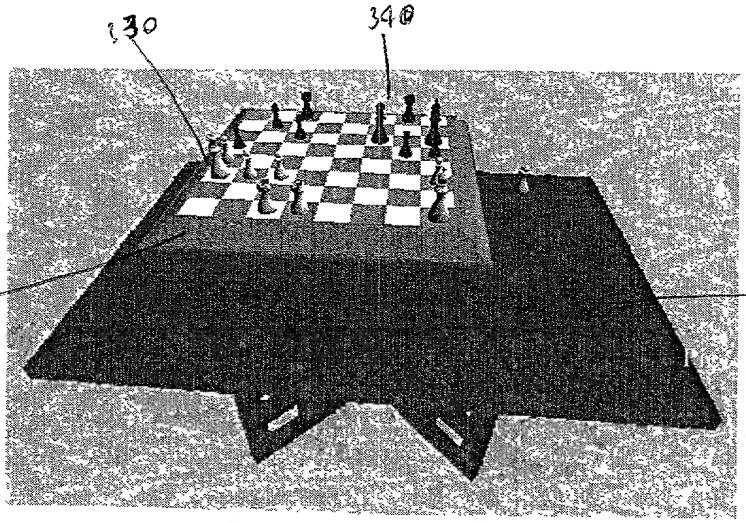
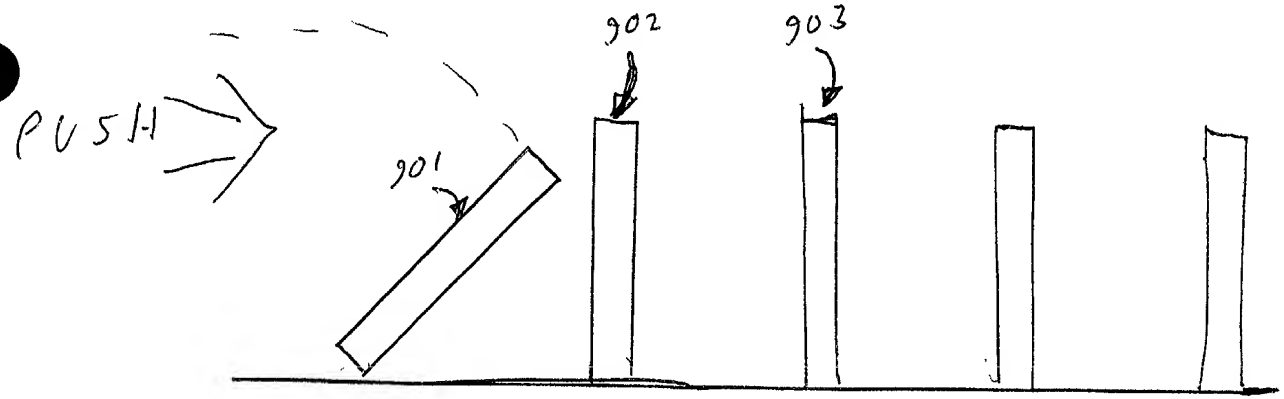


Fig 8



09887025.063501

FIG. 9

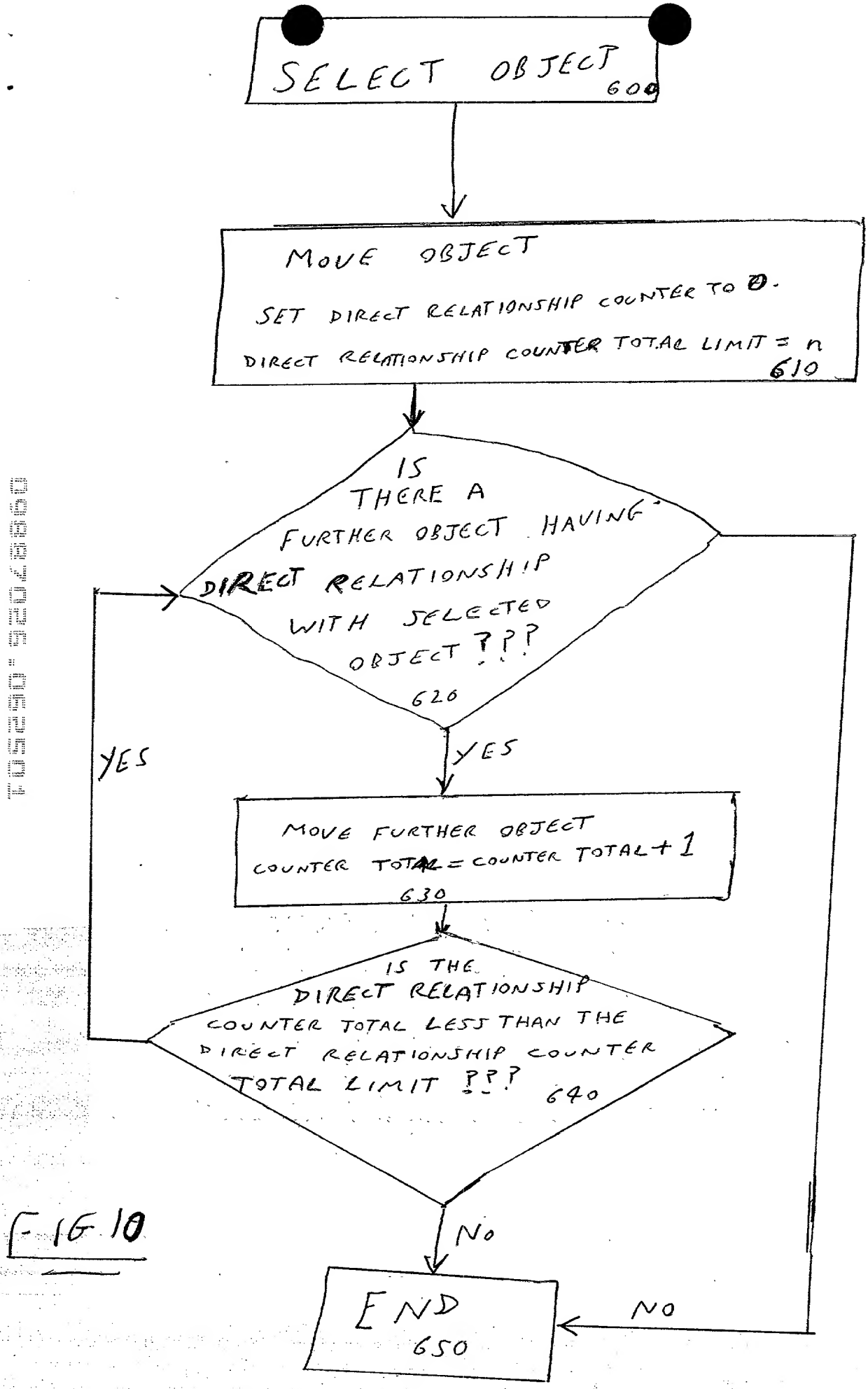

SELECT OBJECT
600
MOVE OBJECT
SET DIRECT RELATIONSHIP COUNTER TO 0.
DIRECT RELATIONSHIP COUNTER TOTAL LIMIT = n
610
IS THERE A FURTHER OBJECT HAVING DIRECT RELATIONSHIP WITH SELECTED OBJECT ???
620
YES
YES
MOVE FURTHER OBJECT
COUNTER TOTAL = COUNTER TOTAL + 1
630
IS THE DIRECT RELATIONSHIP COUNTER TOTAL LESS THAN THE DIRECT RELATIONSHIP COUNTER TOTAL LIMIT ???
640
No
END
650
No

FIG 10

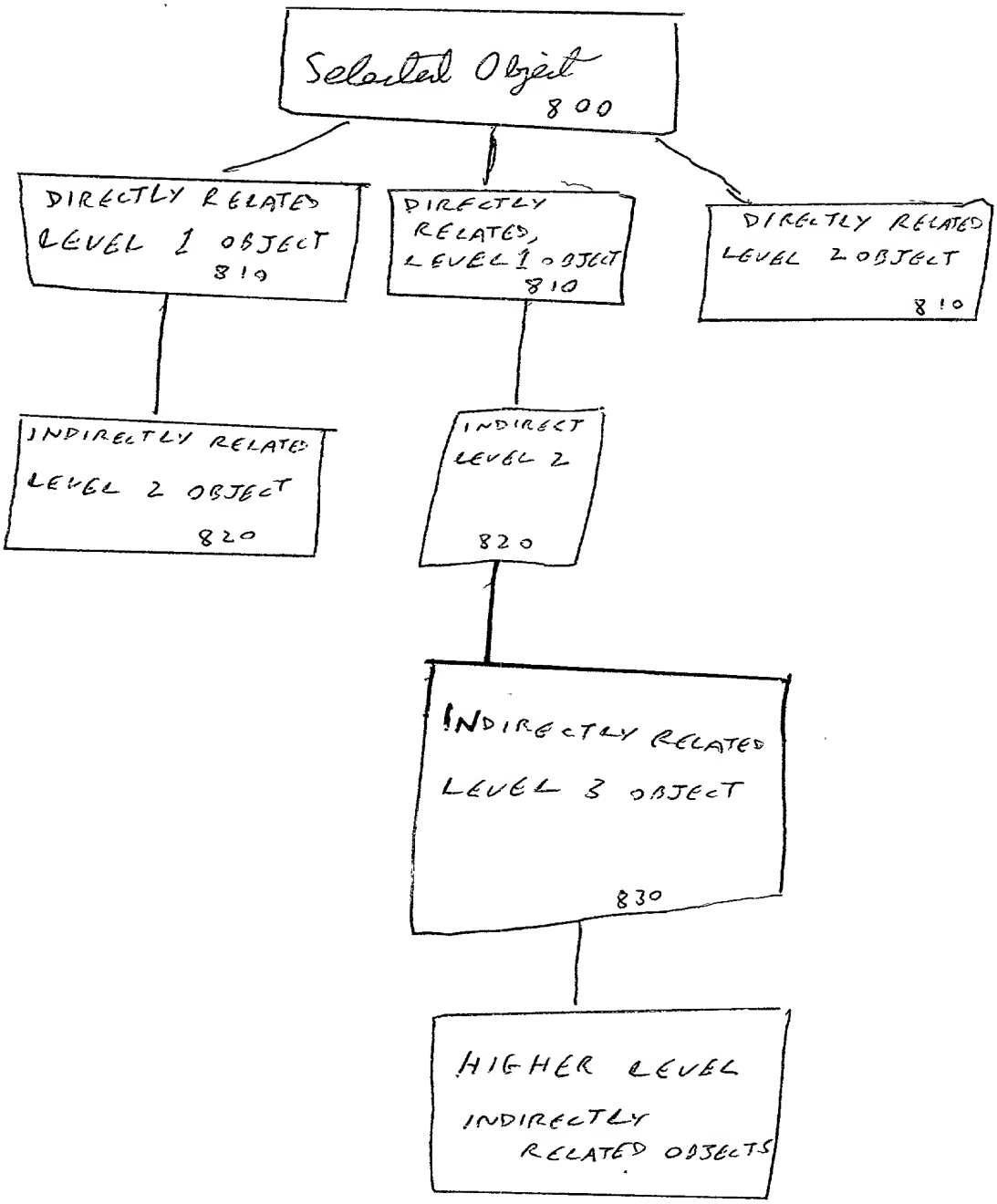

Selected Object
800
DIRECTLY RELATED
LEVEL 1 OBJECT
810
DIRECTLY
RELATED,
LEVEL 1 OBJECT
810
DIRECTLY RELATED
LEVEL 2 OBJECT
810
INDIRECTLY RELATED
LEVEL 2 OBJECT
820
INDIRECT
LEVEL 2
820
INDIRECTLY RELATED
LEVEL 3 OBJECT
830
HIGHER LEVEL
INDIRECTLY
RELATED OBJECTS

FIG. 11